



(RESEARCH ARTICLE)



Knowledge, attitude, and intention to practice female genital mutilation (circumcision) among antenatal women in Enugu, South-East Nigeria

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Abstract

Female Genital Mutilation (FGM) (Cutting/Circumcision) is a die-hard discriminatory practice against women with attendant medical, social, and psychological sequelae. The association of this age-long practice with socio-cultural and religious beliefs ensures that the practice as obnoxious as it is, still persists and is been abetted by trained medical personnel.

Aim: The aim is to ascertain the level of knowledge, attitude, and the intension to practice FGM among pregnant women attending antenatal at ESUT Teaching Hospital Enugu.

Methodology: This is a prospective, questionnaire-based, cross-sectional study of 382 booked and consenting pregnant women at the antenatal clinic. Pretested interviewer-administered questionnaires were randomly administered to the women until the sample size was attained. The data was then analysed using SPSS version 25.

Results: A total of 382 pregnant women were assessed using the questionnaires. More than 95% of them were married, Christian Igbo women. About 80% of them had tertiary level of education. The prevalence of FGM in this study was 19.45. About 91.1% have heard of female circumcision while 63.4% are aware that female circumcision is a crime in Nigeria. About 65% of the respondents have good knowledge of female circumcision while 35% have poor knowledge. About 9.2% of the respondents will allow their daughter(s) to be circumcised. Level of formal education is significantly associated with practice of female circumcision. Women with secondary level of education or below were 5 times more likely to allow their daughters to be circumcised than those with tertiary level of education ($p < 0.001$, OR = 4.610, 95% C.I = 2.245 - 9.468).

Conclusion: The prevalence of FGM is obviously on the decline among antenatal women in Enugu. However, there is still a significant gap in knowledge occasioned mainly by low level of education among some antenatal women. Strategies should be put in place to educate and reorientate antenatal women on the dangers of FGM if eradication of this obnoxious practice must be achieved.

Keywords: Female; Genital; Mutilation; Knowledge; Attitude; Practice

1. Introduction

The World Health Organization (WHO)'s definition of Female Genital Mutilation (FGM) also called Female Genital Cutting or Female Circumcision include all procedures which involve partial or total removal of the external female genitalia and/or injury to the female genital organs, whether for cultural or any other non-therapeutic reasons.¹

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Worldwide, FGM is regarded as a violation of the rights of girls and women which reflects the deep-rooted inequality between the male and female sexes.^{2,3}

The exact prevalence rate of FGM is unknown but reports showed that more than 125 million girls and women alive today have been cut in the 29 countries in Africa and Middle East where FGM is concentrated.⁴ And over 3 million girls are at risk of being subjected to FGM annually.^{5,6} It is most prevalent in the western, eastern, and north-eastern regions of Africa, as well as in Asia and the Middle East.⁶ In Africa, the prevalence varies from 1% in Uganda and Cameroon, 4% in Ghana, 25% in Nigeria, 97% in Guinea, to 98% in Somalia.⁶ Nigerian statistics showed that about 20 million women and girls representing 10% of the global total have undergone FGM.⁶ This makes Nigeria with its large population, the nation with the highest absolute number of cases of FGM worldwide.^{5,7} The prevalence is highest in the South East (35 %) and South West (30 %) and lowest in the North East (6%).⁸ Recent report showed that the prevalence rate is on the rise in Nigeria from 16.9 per cent in 2013 to 19.2 per cent in 2018.⁹

FGM is fraught with barrage of physical, psycho-social, obstetric, and gynaecological complications that may sometimes persist for a lifetime.^{2,4} The immediate complications of FGM include excruciating pain, severe haemorrhage, shock, acute urinary retention, dysuria, and injury to adjacent organs, then tetanus and bacterial infections among others. Some may develop gynatresia, dyspareunia, major degree perineal lacerations, marital disharmony among others. Much later some victims may develop disfiguring hypertrophic scars, vulval and vaginal agglutinations and stenosis and infertility.¹⁰⁻¹⁵

The practice of FGM has persisted despite these complications and the heightened advocacy against its practice. This is partly because the practice of FGM is inherently intertwined in culture, religion and social life of the people. There is a blend of tribal traditional practices, modification of socio-sexual attitudes, superstitious beliefs, part of religious requirements, preservation of chastity, and puritanical measures.^{3,5,8,16} While some reports suggest that FGM is mainly practiced to curtail the possibility of a promiscuous lifestyle,⁸ another study reported that the commonest reason for FGM in Nigeria was to prevent the child's head from touching the clitoris during birth so as to prevent the child from dying.¹⁷ Others believe that cutting and giving away part of female genital organ is a sacrifice to the fertility deity.¹⁸

FGM is such a unique practice because it is about the only obnoxious condition where women are both the victims and the perpetrators of the act. More often than not, a girl's mother or other female relatives arrange for FGM to be performed by traditional female excisers.¹⁹ Recently, trained medical personnel including physicians, nurses, and midwives are reportedly providing FGM services in place of traditional excisers, a phenomenon known as 'medicalization'.²⁰⁻²³ It is reported that parents patronise medical personnel with the belief that the procedure will be less harmful.²³ The Nigerian Demographic and Health Survey 2013 showed that 11.9% of girls aged 0-14 and 12.7% of women aged 15-49 who had FGM were cut by medical professionals mostly midwives.⁸ A study from the Gambia revealed that 42.5% of their health care professionals working in rural areas embraced the continuation of FGM while as high as 47.2% of them intended to subject their own daughters to it, and 7.6% reported having already performed FGM/C during their medical practice.²⁴

Nigeria has clear legal frameworks prohibiting the practice FGM and other inhumane and discriminatory practices against women and children (7). The Violence Against Persons Prohibition (VAPP) Act of 2015 clearly prohibits FGM in Nigeria.²⁵ Some states in Nigeria including Enugu (FGM [Prohibition] Law 2004), Ebonyi (Law Abolishing Harmful Traditional Practices Against Women and Children 2001), and Edo (Prohibition of female genital mutilation law 1999) among others already had this law in place.⁷ Despite the existence of these laws, there is still extremely limited gender awareness and lack of coordinated effort to educate the rural communities, and very poor implementation of the existing laws to stop FGM.²⁶⁻²⁹

Some Nigerian studies showed that some women who had FGM themselves and some who were not cut still intend to subject their daughters to FGM.³⁰⁻³² This intention to practice FGM is the subject of this study. It is reasonable to submit that mothers' opinions may influence that of their children and such opinions may serve as justifications for the continued practice of FGM or its elimination. Understanding the mindset of pregnant women towards the practice of FGM will be a very effective approach towards eradicating this menace. The knowledge and attitude of expectant mothers towards the practice of FGM will certainly affect the sustainability or otherwise of this diehard practice. This study is therefore aimed at ascertaining the knowledge, attitude and the intention to practice of FGM among pregnant women in Enugu Southeast Nigeria with a view to changing this practice through education and reorientation thereby preventing further violation of children and women's rights as well as the attendant medical, social and psychological consequences.

Aim

The aim of this study is to ascertain the knowledge, attitude, and practice of female genital mutilation among antenatal women in Enugu.

Objectives

The main objectives of this study include:

- to ascertain the level of knowledge of pregnant women about FGM
- to ascertain the attitude of pregnant women towards FGM
- to determine the practice of or intention to practice FGM among pregnant women in Enugu.

1.1. Primary outcome measures

- the level of awareness of FGM among pregnant women in Enugu
- the prevalence of FGM among pregnant women in Enugu
- the factors promoting or mitigating the practice of FGM in Enugu.
- the intention to practice FGM by pregnant women in Enugu

2. Materials and methods

2.1. Study centre

This is a hospital-based study conducted at the antenatal clinics of the Department of Obstetrics and Gynaecology of Enugu State University Teaching Hospital (ESUTH), Parklane, Enugu South-East Nigeria.

2.2. Study population

The participants for this study are eligible and consenting pregnant women who ~~were~~ booked, and ~~were~~ are attending antenatal care at ESUTH Parklane, Enugu.

2.3. Inclusion criteria

- Pregnant women who had booked for antenatal care at ESUTH Parklane.
- Pregnant women who gave informed consent for this study.

2.4. Exclusion criteria

Non consenting participants.

2.5. Sample size determination

This is a cross-sectional study so the Cochran's formula for prevalence studies was applied.³³

Sample Size $N = \frac{Z_{1-\alpha/2}^2 p(1-p)}{d^2}$

d^2

Where N = Sample Size

$Z_{1-\alpha/2}^2$ = standard normal variate corresponding to 95% confidence interval.

P = Expected Proportion based on previous study

d = Absolute error or precision.

Using a prevalence rate (P) of (46.7%) from a previous study among pregnant women in Benin City South-south Nigeria³⁰, at a confidence limit of 95%, and 5% type 1 error. The minimum sample size $N = [1.96^2 \times 0.467(1-0.467)] / 0.05^2 = 382$

2.6. Study design and procedure

This prospective cross-sectional study conducted on 382 antenatal patients seen at the antenatal clinics of Enugu State University Teaching Hospital Parklane Enugu from June to September, 2023. Eligible antenatal women were selected by simple random sampling and a structured interviewer-administered questionnaire used to collect information about their socio-demographic characteristics, knowledge, attitude and intention to practice female genital mutilation.

2.7. Data collection and analysis

Data from the completed questionnaires were entered electronically into the computer and analyzed using Statistical Package for Social Sciences [SPSS] software version 25.0.

3. Results

A total of 382 pregnant women who met the inclusion criteria were assessed using the questionnaire and the results were shown below.

Table 1 Demographic characteristics of the respondents

	Frequency	Percent
Age group		
<20	6	1.6
20-29	143	37.4
30-39	212	55.5
40-49	21	5.5
Educational status		
No formal	2	0.5
Primary	2	0.5
Secondary	72	18.8
Tertiary	306	80.1
Marital status		
Never married	13	3.4
Ever married	369	96.6
Ethnic group		
Igbo	370	96.9
Yoruba	4	1.0
Others	8	2.1
Religion		
Christianity	380	99.5
Islam	2	0.5
Parity		
<4	294	77.0
>4	88	23.0

Table 1 shows that more than half of the respondents (55.5%) are between the age range of 30 and 39 years. Most of them (80.1%) have tertiary education while 96.6% are ever married. They are predominantly from the Igbo tribe (96.9%) and Christians (99.5%), with 77.0% having a parity of less than 4.

Table 2 shows that 91.1% have heard of female circumcision while 63.4% are aware that female circumcision is a crime in Nigeria. Whereas 26.2% of the respondents have knowledge of law prohibiting female circumcision, 13.1% and 61.3% know about the benefits and dangers respectively. More than half of the respondents (60.2%) reported that female circumcision is a violation of the rights of the girl child.

Table 2 Knowledge of female circumcision

S/n	Items	Frequency	Percent
1	Have you heard of female circumcision?		
	yes	348	91.1
	no	34	8.9
2	Are you aware that female circumcision is a crime in Nigeria?		
	yes	242	63.4
	no	140	36.6
3	Do you know of any law prohibiting female circumcision in Nigeria?		
	Yes	100	26.2
	No	282	73.8
4	Do you know of any health benefits of female circumcision?		
	yes	50	13.1
	no	332	86.9
5	Do you know of health dangers of female circumcision?		
	Yes	234	61.3
	No	148	38.7
6	Do you know if female circumcision is a violation of the rights of the girl child?		
	yes	230	60.2
	no	152	39.8

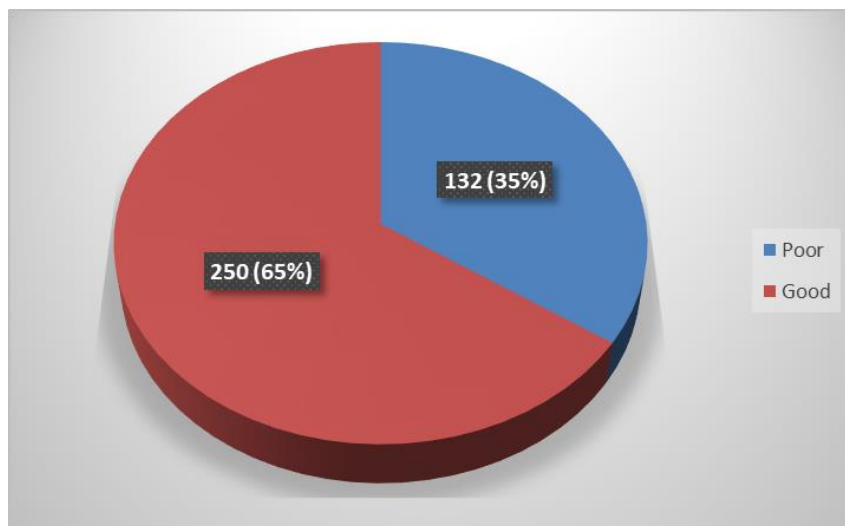


Figure 1 Summary of knowledge of female circumcision

About 65% of the respondents have good knowledge of female circumcision while 35% have poor knowledge.

Table 3 Attitude of respondents towards female circumcision

S/n	Items	Frequency	Percent
1	Do you believe that female circumcision is a good tradition or culture that must be maintained?		
	Yes	50	13.1
	No	332	86.9
2	Do you believe that female circumcision is a religious requirement that must be met by your religious group?		
	Yes	42	11.0
	No	340	89.0
3	Do you agree that circumcision prevents girls from becoming wayward or promiscuous later in life		
	Yes	86	22.5
	No	296	77.5
4	Do you agree that women should be educated on the effects of female circumcision?		
	Yes	350	91.6
	No	32	8.4
5	Do you agree that female circumcision is a requirement for the girl child to be accepted into female social group?		
	Yes	48	12.6
	No	334	87.4
6	Will you recommend female circumcision to another woman		
	Yes	43	11.3
	No	339	88.7
7	Do you agree that female circumcision should be encouraged in our communities?		
	yes	40	10.5
	no	342	89.5
	Do you believe that circumcision done by medical personnel should be encouraged?		
	yes	92	24.1
	no	290	75.9

Table 3 shows that 13.1% believe that female circumcision is a good tradition or culture that must be maintained while 11% believe that it is a religious requirement that must be met. Other attitude and perceptions include that circumcision prevents girls from becoming wayward or promiscuous later in life (22.5%), women should be educated on the effects of female circumcision (91.6%) and female circumcision is a requirement for the girl child to be accepted into female social group (12.6%). The table shows that 11.3% of the respondents will recommend female circumcision to another woman while 10.5% were of the opinion that female circumcision should be encouraged in our communities. Moreover, 24.1% believe that circumcision done by medical personnel should be encouraged.

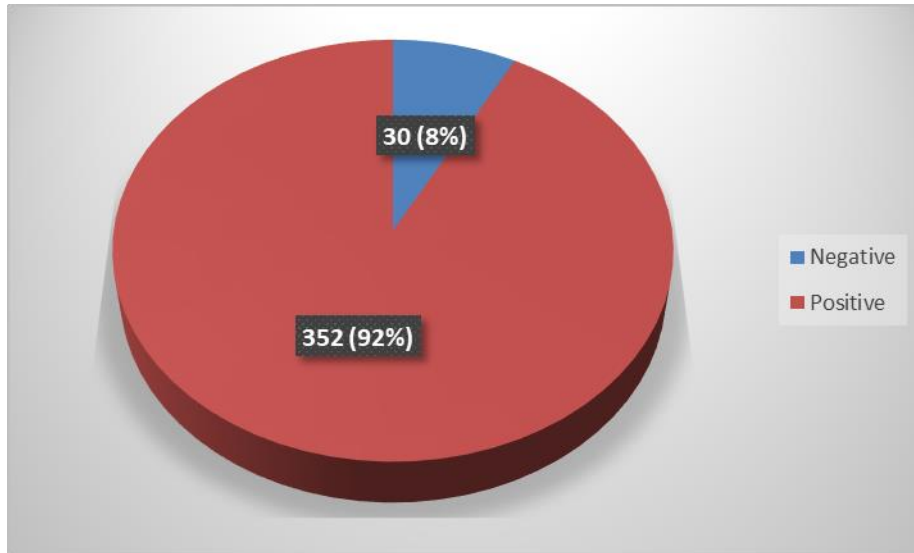


Figure 2 Summary of attitude of respondents towards female circumcision

About 92% of the respondents have positive attitude towards female circumcision while 8% have negative attitude.

Table 4 Practice of female circumcision

S/n	Items	Frequency	Percent
1	<i>Were you circumcised?</i>		
	Yes	74	19.4
	No	308	80.6
2	<i>Will you allow your daughter(s) to be circumcised?</i>		
	yes	35	9.2
	no	347	90.8
3	<i>Who performs female circumcision in your community?</i>		
	Traditional birth attendants	281	73.6
	Nurse/midwives	166	43.5
	Medical doctors	93	24.3

Table 4 shows that 19.4% of the respondents were circumcised and 9.2% of the respondents will allow their daughter(s) to be circumcised. Female circumcision is performed mostly by traditional birth attendants as reported by 73.6% of the respondents, while 43.5% and 24.3% reported that female circumcision is performed by Nurse/midwives and medical doctors respectively.

Table 5 shows that level of education is significantly associated with knowledge of female circumcision. Pregnant women with secondary level of education or below were less likely to have good knowledge of female circumcision than those with tertiary level of education ($p = 0.002$, $OR = 0.443$, $95\% C.I = 0.266 - 0.739$). Age, marital status and parity were not significantly associated with knowledge of female circumcision ($p > 0.05$).

Table 5 Association between demographic characteristics and knowledge of female circumcision

	Knowledge		P value	OR	95% C.I for OR
	Good n (%)	Poor n (%)			
Age group					
<30	94 (63.1)	55 (36.9)	0.439	0.844	0.549 – 1.297
≥30	156 (67.0)	77 (33.0)			
Level of Education					
≤ Secondary	38 (50.0)	38 (50.0)	0.002	0.443	0.266 – 0.739
Tertiary	212 (69.3)	94 (30.7)			
Marital Status					
Never married	8 (61.5)	5 (38.5)	0.763	0.840	0.269 – 2.620
Ever married	242 (65.6)	127 (34.4)			
Parity					
<4	190 (64.6)	104 (35.4)	0.539	0.853	0.513 – 1.417
>4	60 (68.2)	28 (31.8)			

Table 6 Association between demographic characteristics and Attitude of women towards female circumcision

	Attitude		P value	OR	95% C.I for OR
	Positive n (%)	Negative n (%)			
Age group					
<30	135 (90.6)	14 (9.4)	0.372	0.711	0.336 – 1.503
≥30	217 (93.1)	16 (6.9)			
Level of Education					
≤ Secondary	64 (84.2)	12 (15.8)	0.006	0.333	0.153 – 0.726
Tertiary	288 (94.1)	18 (5.9)			
Marital Status					
Never married	13 (100.0)	0 (0.0)	NA	NA	NA
Ever married	339 (91.9)	30 (8.1)			
Parity					
<4	276 (93.9)	18 (6.1)	0.025	2.421	1.117 – 5.246
>4	76 (86.4)	12 (13.6)			

NA = Not Applicable

Table 6 shows that level of education is significantly associated with attitude of pregnant women towards circumcision. Women with secondary level of education or below were less likely to have positive attitude towards female circumcision than those with tertiary level of education ($p = 0.006$, OR = 0.333, 95% C.I = 0.153 – 0.726). Women with parity of less than 4 were 2 times more likely to have positive attitude towards female circumcision than those with parity of greater than 4 ($p = 0.025$, OR = 2.421, 95% C.I = 1.117 – 5.246).

Table 7 Association between demographic characteristics and practice of female circumcision

	Allow daughter to be circumcised?		P value	OR	95% C.I for OR
	Yes n (%)	No n (%)			
Age group					
<30	15 (10.1)	134 (89.9)	0.624	1.192	0.590 – 2.409
≥30	20 (8.6)	213 (91.4)			
Level of Education					
≤ Secondary	17 (22.4)	59 (77.6)	< 0.001	4.610	2.245 – 9.468
Tertiary	18 (5.9)	288 (94.1)			
Marital Status					
Never married	1 (7.7)	12 (92.3)	0.852	0.821	0.104 – 6.509
Ever married	34 (9.2)	335 (90.8)			
Parity					
<4	25 (8.5)	269 (91.5)	0.416	0.725	0.334 – 1.574
>4	10 (11.4)	78 (88.6)			

Table 7 shows that level of education is significantly associated with practice of female circumcision. Women with secondary level of education or below were 5 times more likely to allow their daughters to be circumcised than those with tertiary level of education ($p < 0.001$, OR = 4.610, 95% C.I = 2.245 – 9.468). Age, marital status and parity were not significantly associated with knowledge of female circumcision ($p > 0.05$).

4. Discussion

The age groups of the respondents are expectedly a reflection of the reproductive potentials in women as almost 93% of the respondents fall between 20-39 years old. The peak age group is 30-39 years which agreed with the report that nowadays women tend to defer childbearing primarily in pursuit of higher education and empowerment. The preponderance of the respondents from the Igbo tribe and from the Christian religious denomination are not unexpected as the study was conducted in Enugu, the capital of the South-Eastern Nigeria predominantly inhabited by the Igbos who are mostly Christians. More than 80% of the respondents have some form of post-secondary education. This very high literacy level is a reflection of the urban population sampled for this study and this correlated well with the level of awareness of FGM.

The prevalence of FGM in this study is 19.4%. This is almost the same with the 19.2% national prevalence rate reported by UNICEF IN 2018.⁹ However, this prevalence rate is in fact the lowest recorded prevalence rate from the available recent studies in Nigeria. It is lower than the 23.3% reported by Abubakar et al³⁴ in Kano, 42.1% by Ezenyaku et al³⁵ in Enugu, 46.7% by Obi and Igbinalodor³¹ in Benin City, 49.6% by Ibekwe et al³² in Abakiliki, 53.2% by Ugboma et al³⁶ in Port Harcourt, 56.3% by Omolase et al³⁰ in Owo, and 66% by Awusi³⁷ in Isoko Delta State. The relatively lower prevalence may suggest declining acceptance and practice of FGM in Igbo land given that ethnicity, tribe and culture may have influenced the very high prevalence rates documented above from the South-South and South-Western Nigeria.

In this study, 91% of the respondents are aware of FGM. This is similar to 90.5% awareness level reported by Ibekwe et al³² from a survey on FGM in nearby Abakiliki, Ebonyi state and 91.4% awareness level reported by Abubakar et al³⁶ in a similar study of the 'Knowledge, attitude and practice of female genital cutting among antenatal patients' in Aminu Kano Teaching Hospital, Kano but it is higher than the 70.3% reported by Omolase et al³⁰ in a similar study in Owo. It is however less than the 97.1% reported by Ezenyeaku et al³⁵ in Enugu 12 years ago. This is not surprising since more than 80% of the respondents had at least some level of post-secondary education. This is close to the 60.8% that had tertiary education from Abakiliki in the study by Ibekwe et al.³² This is reflected in the fact that 61% of respondents

believed that FGM is injurious to women and girls and it is actually a violation of women's right but as high as 73% of the respondents that there is any law prohibiting the practice of FGM in Nigeria.

Regardless of the level of knowledge exhibited by the respondents 22.5% believe that FGM prevents girls from becoming wayward or promiscuous while almost the same number 24.1% believe that FGM performed by medical professional should be encouraged and 13% believed that FGM is their culture that should be upheld. Even more worrisome is the fact that as many as 43 (11.3%) respondents indicated that they will recommend FGM to other women. It is noteworthy that as many as 35 (9.2%) respondents agreed that they will allow their unborn female babies to be circumcised regardless of who does the cutting. Prevention of promiscuity, culture and tradition have been shown to be the principal reasons why women still want to indulge in FGM.^{30-32,34-37} Cultures and traditions die hard and strategies to permanently eradicating FGM must be based on cultural re-orientation. Medical professionals instead of championing the practice of FGM for pecuniary reasons, should be in the forefront of the campaign against this practice using their medical knowledge.

Level of education is the single most important determinant of the likelihood to indulging in FGM practice. Low level of education is significantly associated with the practice of FGM. Pregnant women with secondary level of education or below are less likely to have good knowledge of female circumcision compared with those with tertiary level of education ($p = 0.002$, OR = 0.443, 95% C.I = 0.266 – 0.739) just as they are less likely to have positive attitude towards female circumcision compared with those with tertiary level of education ($p = 0.006$, OR = 0.333, 95% C.I = 0.153 – 0.726). Again, and more importantly, women with secondary level of education or below are 5 times more likely to allow their daughters to be circumcised than those with post-secondary education ($p < 0.001$, OR = 4.610, 95% C.I = 2.245 – 9.468). This shows that the knowledge, attitude and intention to practice FGM are all routed in the ignorance and illiteracy.

We advocate massive sensitization using multiple channels especially the social media to drive home the message of reorientation. The promulgated legislations against the practice of FGM must be put into force and offenders punished without delay. Compulsory girlchild education must be instituted and the teaching of FGM and its complications made part of the Social/Civic Education curriculum. Antenatal health talks for pregnant women must co-opt the topic of FGM and its complications since antenatal clinic services is one of the most reliable avenues for the sensitization of expectant mothers on the dangers inherent in FGM.

In conclusion, the prevalence of FGM among antenatal women in Enugu is not different from the national prevalence. A good number of antenatal women are circumcised and many of them still intend to circumcise their unborn daughters. There is still a significant gap in knowledge occasioned mainly by low level of education among some antenatal women. Strategies should be put in place to educate and reorientate antenatal women on the dangers of FGM if eradication of this obnoxious practice must be achieved.

Compliance with ethical standards

Acknowledgement

We acknowledge the support and assistance from the resident doctors of obstetrics and gynaecology department for helping to administer the questionnaires. We appreciate the nurses of the antenatal clinics for their cooperation.

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of ethical approval

Ethical clearance was obtained from the Ethics and Research Committee of ESUTH Parklane, Enugu. Permission to conduct the research was also obtained from the Head, Department of Obstetrics and Gynaecology ESUTH Parklane as well as the Unit Head of the Antenatal Clinics before commencing the research.

Statement of informed consent

A signed informed consent was obtained from each participant after due counselling.

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